

CORRESPONDENCE

Decline in the Birth-Rate

To the Editor, *Eugenics Review*

SIR,—In his paper on "The Decline in the Birth-rate" (October 1934, page 193), Dr. W. Wagner-Manslau has compiled some figures illustrating the increase of a number of European nations during the nineteenth century. He shows that the German population increased more rapidly during the first decades of the century than in the time from 1840 to 1870. From this fact Wagner-Manslau draws the following conclusion: "Had the figures increased after 1810 . . . the increase might have been due to advances in sanitation and general hygiene. Since, however, they decrease rapidly, they can only represent a considerable decline in the birth-rate."

Fortunately, the gross increase-rate is not our only source of information. We have at our disposal birth- and death-rates of all the important parts of the later German empire, reaching back to the twenties or even further. Let us take the largest state, Prussia, as an example:

	marriage- rate.	birth- rate.	death- rate.	surplus- rate.
1816-20	10·6	42·5	27·4	15·1
1821-30	8·9	40·0	26·7	13·3
1831-40	9·1	38·0	28·8	9·2
1841-50	8·9	38·0	26·6	11·4
1851-60	8·6	37·7	27·6	10·1
1861-70	8·5	38·3	27·0	11·3
1871-80	8·7	39·0	26·7	12·3
1881-90	8·1	37·4	24·7	12·7
1891-1900	8·3	36·7	21·9	14·8

The marriage-rate and the birth-rate are high immediately after the Napoleonic wars, but afterwards, from about 1925 up to the "foundation times," conditions remain fairly constant. There is no indication of a "considerable decline in the birth-rate" about 1850. After the war against France there is another wave of fertility, but in the last decades of the century the birth-rate begins to drop, the rapidity of the decline increasing very much after 1900.

Neither does the death-rate show great fluctuations; it remains about 27 per 1,000 inhabitants up to the 'seventies, and declines afterwards even quicker than the birth-rate. Only in the decade 1831 to 1840 is mortality higher, owing to the great cholera epidemic.

In Bavaria, Saxony, etc., the trend of the figures is about the same. Now, why did the German population increase so slowly during the middle decades of the nineteenth century? The riddle is easily solved when we look at the emigration statistics. The following table shows the total

oversea emigration from the territory of the Reich in every decade. There is one climax after the revolution of 1848 and another in the 'eighties. They correspond exactly with the lowest increase rates in Wagner-Manslau's table.

	Total emigration	
1820-40	...	176,000
1841-50	...	469,000
1851-60	...	1,075,000
1861-70	...	833,000
1871-80	...	626,000
1881-90	...	1,342,000
1891-1900	...	530,000

The population of Russia increased much more quickly after than before 1861. Wagner-Manslau believes that the Russian birth-rate increased after the peasants' emancipation in that year. As a matter of fact, the birth-rate remained as it was and the death-rate went down.

	birth-rate	death-rate
1841-50	48·3	40·3
1851-60	48·6	40·3
1861-70	49·3	37·1
1871-80	49·2	35·3
1881-90	48·6	33·9
1891-1900	48·0	32·9

Finally, I must draw your attention to the fact that the incredibly low increase of population in the United Kingdom between 1840 and 1850 is, of course, only due to the inclusion of Ireland, where as a result of the great famine the population was reduced from 8·2 to 6·6 millions. The population of England alone increased nearly 13 per cent. during that decade.

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Biometrika

To the Editor, *Eugenics Review*

SIR,—I shall be much obliged if you will permit me to correct a mis-statement which occurs on page 237 (October 1934) of your valuable journal. *Biometrika* was founded for the statistical study of biological problems, but the first four lines of the first issue of that journal, repeated from the circular that announced its foundation, run as follows:

"It is intended that *Biometrika* shall serve as a means not only of collecting under one title biological data of a kind not systematically collected or published in any other periodical, but also of spreading a knowledge of such statistical theory as may be requisite for their scientific treatment." (Vol. I, p. 1, 1901.)